

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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**Ex parte** ROLAND M. MORLEY, ROBERT F. KWASNICK,  
and ROBERT C. SUNDAHL

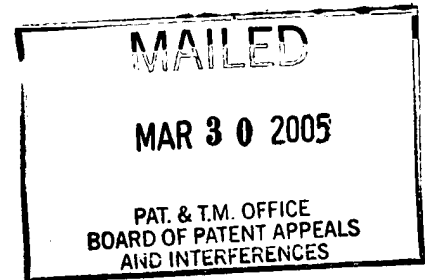
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Appeal No. 2005-0840  
Application No. 09/847,447

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ON BRIEF

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Before GARRIS, PAK, and DELMENDO, **Administrative Patent Judges**.

PAK, **Administrative Patent Judge**.

**DECISION ON APPEAL**

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 11, which are all of the claims pending in the present application.

**APPEALED SUBJECT MATTER**

The subject matter on appeal is directed to a large format display. See the specification in its entirety. The large

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format display forms a large unitary image by combining the images produced from a plurality of conventional displays. See the specification, page 1. Details of the appealed subject matter are recited in illustrative claim 1 which is reproduced below:

1. A large format display comprising:

a plurality of emissive display modules, each module including at least two alignment elements; and

a backframe including a plurality of alignment devices to mate with the alignment elements of said display modules.

The above claim language "comprising" permits the inclusion of elements and materials other than those claimed. ***In re Baxter***, 656 F.2d 679, 686-87, 210 USPQ 795, 802-03 (CCPA 1981) ("As long as one of the monomers in the reaction is propylene, any other monomer may be present, because the term 'comprises' permits the *inclusion* of other steps, elements, or materials.")

#### **PRIOR ART REFERENCES**

As evidence of unpatentability, the examiner relies on the following prior art references:

Minemoto et al. (Minemoto)	5,436,920	Jul. 25, 1995
Li	5,563,470	Oct. 8, 1996
Seraphim et al. (Seraphim)	5,889,568	Mar. 30, 1999
Matthies et al. (Matthies)	6,370,019	Apr. 9, 2002

(Filed Feb. 16, 1999)

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### **THE REJECTIONS**

The appealed claims stand rejected as follows:

- (1) Claim 1 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Li;
- (2) Claims 1 through 6 and 8 under 35 U.S.C. § 102(b) as anticipated by the disclosure of Seraphim;
- (3) Claim 7 under 35 U.S.C. § 103 as unpatentable over the combined disclosure of Seraphim and Minemoto; and
- (4) Claim 7 under 35 U.S.C. § 103 as unpatentable over the combined disclosure of Seraphim and Matthies.

### **OPINION**

We have carefully reviewed the claims, specification and applied prior art, including all of the arguments advanced by the examiner and the appellants in support of their respective positions. This review has led us to conclude that the examiner's rejections are well founded. Accordingly, we affirm the examiner's rejections for essentially those reasons set forth in the Answer and below.

The appellants do not dispute the examiner's determination that the applied prior art references teach and/or would have suggested each and every element recited in the claims on appeal, except for the alignment elements and devices recited in claim

1.<sup>1</sup> Compare the Answer in its entirety with the Brief and the Reply Brief in their entirety. The dispositive question is, therefore, whether the claimed alignment elements and devices, as properly interpreted, embrace the contact pads and contact pads having solder described in Li or Seraphim. We answer this question in the affirmative.

As found by the examiner (Answer, pages 3-4), Li teaches employing a plurality of contact (locator) pads on emissive display modules (tiles) and a back frame (base plate) for the alignment purpose. We find that Li teaches at, e.g., column 1, lines 43-57, that:

The alignment of tiles is accomplished by precisely and accurately positioning locator pads on the base plate to which the tiles are to be mounted, and positioning corresponding locator pads on the surface of the tile which will be adjacent the base plate. Conventional lithographic techniques permit the location of such pads with an accuracy of less than a few microns, thus enabling the horizontal position of a tile to be precisely located on the base plate, or substrate. The locator pads are of a material which will accept a flowable joint material which can be deposited on one set of pads. The tiles are then positioned over the base plate with the joint material aligned with the locator pads on the base plate, and the joint material is caused to flow to contact the corresponding pads so that the tiles are joined to the

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<sup>1</sup> The appellants also state at page 5 of the Brief that "[a]ll of the claims may be grouped with claim 1 for convenience on appeal."

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base plate. The flowable joint material preferably is solder, and the contact pads preferably are a metal which will be wetted by the solder for mechanically and electrically coupling the corresponding pads to each other to mechanically mount the tiles on the base plate . . . .

Seraphim, like Li, teaches employing contact pads and contact pads having solder as means for aligning and attaching tiles (display modules) to a back or base plate. Compare Seraphim, column 14, lines 35-41 with Li, column 1, lines 38-62.

Specifically, Seraphim teaches that its tiles are also attached to the base plate and aligned using the passive alignment technique taught by Li. See column 14, lines 35-41.

Since these contact pads and contact pads having solder are used for the alignment and connecting (mating) purposes and since the claimed alignment elements and devices are not defined structurally or otherwise to exclude the contact pads and contact pads having solder, we concur with the examiner that the claimed alignment elements and devices, as properly interpreted, encompass the contact pads and contact pads having solder, respectively, described in Li and Seraphim. *In re Yamamoto*, 740 F.2d 1569, 1571, 222 USPQ 934, 936 (Fed. Cir. 1984 (During prosecution of a patent application, the terms in the claims on appeal are given the broadest reasonable meaning in light of the

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appellants' specification). This interpretation is consistent with the specification which indicates that the claimed alignment elements and devices embrace various designs. Specifically, the specification, at pages 5 and 6, describes the claimed alignment elements and devices in its "Detail Description" section as follows:

A pair of alignment elements 112 on the backplate 110 provide x and y alignment control at display assembly between the display tile 100 and the backplate 110. **A variety of alignment elements 112 may be used including holes, grooves, tabs, and a variety of pin shapes as a few examples . . . .**

. . . .

Referring to Figure 3, the backframe 120 may include a number of alignment devices 124 to receive the alignment elements 112 . . . . **The alignment devices 124 may be pins, holes, grooves, or tabs, as a few examples . . . .** [Emphasis added.]

There is nothing in the claims on appeal and/or the specification which indicates that the claimed alignment elements and devices do not embrace the so-called "passive" alignment elements and devices of the type (contact pads and contact pads having solder) described in either Li or Seraphim. Thus, on this record, we are constrained to agree with the examiner that Li and Seraphim individually teaches the claimed alignment elements and devices. Accordingly, we affirm all of the foregoing rejections.

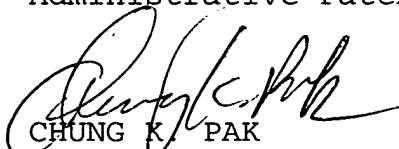
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No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136(a).

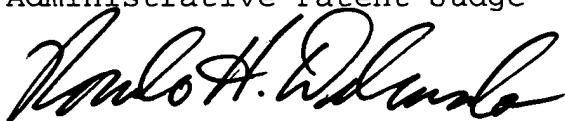
**AFFIRMED**



BRADLEY R. GARRIS )  
Administrative Patent Judge )



CHUNG K. PAK )  
Administrative Patent Judge )



ROMULO H. DELMENDO )  
Administrative Patent Judge )

BOARD OF PATENT  
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*TIMOTHY N. TROP*  
*TROP, PRUNER & HU, P.C.*  
*8554 KATY FWY., STE. 100*  
*HOUSTON, TX 77024-1805*